N = 246 = 2*3*41

By the Ibukiyama-Kitayama dimension formula,
dim(S_4(K(246))) = 149

By the Skoruppa-Zagier dimension formula and Jacobi restriction,
the lift dimension of S_4(K(246))^+ is 42
the nonlift dimension of S_4(K(246))^+ is heuristically 82
dim(S_4(K(246))^+) thus is heuristically 124
dim(S_4(K(246))^-) is heuristically 25

dim(J_{2,246}^{cusp}) = 4 (Skoruppa-Zagier), so need to span to within 3 dimensions

q = 7 for TraceDown
After TD(Grit(J_{4,1722}^{cusp})) and (Grit(J_{2,246}^{cusp}))^2,
spanned rank in S_4(K(246))^+ is 121
spanned rank in S_4(K(246))^- is 0

Hecke operators applied: {{{2, 2}}, {{2, 2}, {2, 1}}, {{3, 2}}, {{2, 2}, {3, 1}}}
After Hecke spreading,
spanned rank in S_4(K(246))^- is 19

After Borcherds products,
spanned rank in S_4(K(246))^- is 25

Final spanned rank in S_4(K(246))^+ is 121
Final spanned rank in S_4(K(246))^- is 25

S_2(K(246)) is determined by Jacobi restriction and the H4Nd1(2) test
(dim(H_4(246,2,1)) <= 3 and this is less than dim(J_{2,246}^{cusp})+1 = 5)

So S_2(K(246)) = Grit(J_{2,246}^{cusp}) (dimension 4)